AMENDMENT TO THE CLAIMS

1. (Currently Amended) An apparatus for cache flushing, comprising:

a list structure ~~for tracking~~ to track a status of a plurality of cache entries, wherein

said list structure is located outside a cache and wherein said list structure does not contain cache

data or addresses;

a query mechanism ~~for checking~~ to check said list structure for the state of a cache entry;

and

a cache flush mechanism, logically coupled to said list structure and the cache, ~~for~~

~~flushing~~ to flush a cache entry and for modifying said list structure to reflect a flushed state.

2. (Original) An apparatus in accordance with claim 1, wherein:

said list structure comprises one bit per cache line.

3. (Original) An apparatus in accordance with claim 1, wherein:

said list structure comprises one bit per plurality of cache lines.

4. (Original) An apparatus in accordance with claim 1, wherein:

said list structure comprises one bit per cache way.

5. (Previously Presented) An apparatus in accordance with claim 1, further comprising:

one bit per a variable number of cache lines; and

wherein a logical arrangement of said list structure conforms to said variable number.

6.   (Original) An apparatus in accordance with claim 5, wherein:

said variable number is set by an operating system.

7.   (Previously presented) An apparatus in accordance with claim 1, wherein:

a logical arrangement of said list structure matches an architecture of a cache.

8.   (Previously Presented) An apparatus in accordance with claim 1, wherein:

said cache flush mechanism modifies a cache state responsive to results of a query of the

said list structure.

9.   (Original) An apparatus in accordance with claim 8, wherein:

said cache flush mechanism is logically coupled to a higher level cache for writing back

modified data.

10.   (Original) An apparatus in accordance with claim 8, wherein:

said cache flush mechanism based on the said list structure is logically coupled to a

higher level cache for evicting modified data.

11.   (Previously Presented) An apparatus in accordance with claim 8, wherein:

said cache flush mechanism is logically coupled to a main memory for writing back

modified data.

12.   (Previously Presented) An apparatus in accordance with claim 8, wherein:

said cache flush mechanism is logically coupled to a main memory for evicting modified

data.

13.   (Original) An apparatus in accordance with claim 1, wherein:

said list structure is located in random access memory (RAM).

14.   (Previously Presented) An apparatus in accordance with claim 1, wherein:

said list structure is located on a die.

15.   (Currently Amended) An apparatus in accordance with claim 1, further comprising:

a snoop command interpreter for checking to check said list structure in response to a

snoop command.

16.   (Currently Amended) In a computer system with a cache memory, an apparatus for

flushing the cache, comprising:

a list structure for recording to record modifications to a plurality of cache entries

wherein, wherein said list structure is located outside a cache and said list structures does not

contain cache data or addresses;

a cache controller adapted to query said list structure for modifications to said plurality of

cache entries and generate a list of cache write-back instructions; and

wherein said cache controller is to invalidates invalidate said plurality of cache entries

corresponding to said list of cache write-back instructions.

17.   (Original) An apparatus in accordance with claim 16, wherein:

said list structure is a full list.

18.   (Original) An apparatus in accordance with claim 16, wherein:

said list structure is a partial list.

19.   (Previously Presented) An apparatus in accordance with claim 17, wherein:

said full list comprises one entry per cache line.

20.   (Original) An apparatus in accordance with claim 18, wherein:

said partial list comprises one entry per plurality of cache lines.

21.   (Currently Amended) In a multiprocessor computer system with a plurality of processors

and cache memory, an apparatus for cache flushing, comprising:

a list structure ~~for tracking~~ to track a status of a plurality of cache entries, wherein said

list structure is located outside a cache and wherein said list structure does not contain cache data

or addresses;

a processor identification within said list structure ~~for linking~~ to link each of said plurality

of cache entries to one of the plurality of processors;

a query mechanism ~~for checking~~ to check said list structure for a state of a cache entry

identified with a processor;

a cache flush mechanism ~~for flushing~~ to flush a cache entry linked to an identified

processor and ~~for modifying~~ to modify said list structure to reflect a flushed status.

22.   (Original) An apparatus in accordance with claim 21, wherein:

said list structure contains at least one bit for each cache line.

23.   (Original) An apparatus in accordance with claim 21, wherein:

said list structure contains at least one bit for each of a plurality of cache lines.

24.   (Original) An apparatus in accordance with claim 21, wherein:

said list structure is located on a die with at least one of the plurality of processors.

25.   (Previously Presented) A method of flushing a cache, comprising:

creating a table of cache entries separate from the cache and without the cache data or

addresses;

tracking modified cache entries in said table; and

generating a write-back command from said table in response to a cache flush event.

26.   (Original) A method in accordance with claim 25, further comprising:

generating an invalidate command in response to a cache flush event.

27.   (Previously Presented) A method in accordance with claim 25, further comprising:

repeating the method for each level of cache.

28.   (Original) A method in accordance with claim 25, further comprising:

querying said table in response to a snoop command.

29.   (Original) A method in accordance with claim 25, further comprising

writing-back modified cache entries to memory.

30.   (Original) A. method in accordance with claim 25, further comprising:

writing-back modified cache entries to a high level cache.